

REMARKS

This application was filed and examined with claims 1 through 36. The Examiner rejects claims 1 through 17, 28 and 29 and objects to claims 18 through 27 and 30 through 36. Applicants are amending claims 1, 3, 4, 15 and 28. Claims 1 through 36 remain in the application.

Applicants request reconsideration and reexamination of the above-identified application in view of the amendments made to the specification and claims. The following remarks state Applicant's bases for making this request and are organized according to the Examiner's Action by the Examiner's titles.

Examiner's Action - Refusal under 35 U.S.C. 112

The Examiner rejects claims 4 through 14 under 35 U.S.C. 112, second paragraph, specifically referring to a lack of "clear antecedent basis for the 'angularly spaced apertures' recited at line 4." Applicants are changing the phrase "one-way valve structures" to "one-way valve". This amended phrase has antecedent basis in independent claim 1. Applicants respectfully submit that this amendment is not intended to change, and does not change, the scope of claim 4 or any claim depending therefrom.

Examiner's Action - Claim Rejections under 35 U.S.C. 102

The Examiner rejects claims 28 and 29 under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 6,797,160 to Huang (hereinafter the "Huang reference"). Specifically the Examiner argues that the Huang reference discloses a beverage brewing system with a cylindrical body 11 and a piston 14 containing a plurality of one-way valves 17 with an operator 136 for moving the piston along the cylindrical body.

Applicants respectfully traverse this rejection.

The piston structure in the Huang reference includes three basic elements, namely: (1) an upper isolating layer 16, (2) a lower filter layer 14 and (3) an intermediate connecting member 30. FIG. 2 discloses valves 171 that open during downward motion of the piston structure. FIG. 3 discloses a valve 23 that opens during upward motion of the piston structure. However, the valves and related passages only extend through the upper isolating layer 16.

Applicants respectfully submit that the invention identified in claim 28 includes a one-way valve that extends through the piston structure, not just a portion of the piston structure as, for example, the upper isolating layer 16 in the Huang reference. Further, the one-way valve in claim 28 defines a unitary structure that performs two functions. First, the valve controls flow through the entire piston assembly and is sized to perform a filter function. However, when the one-way valve is closed, the claimed piston structure performs an isolation function. Claim 28 is amended to define these two functions more clearly.

Further, claim 28 recites a single one-way valve through the piston structure. Claim 29 recites a plurality of such valves. Nothing in the Huang reference discloses a plurality of one-way valves having the structure as defined by claims 28 and 29.

Therefore Applicants respectfully submit that the Huang reference does not disclose the invention as recited in claim 28 or 29. Moreover, Applicants respectfully submit that the Huang reference does not suggest the invention as defined in claim 28 or 29.

Examiner's Action - Claim Rejections under 35 U.S.C. 103

Claims 1, 2, 15 and 16

The Examiner rejects claims 1, 2, 15 and 16 under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 5,453,189 to Jorgenson (hereinafter the "Jorgenson reference") in view of the Huang reference. Particularly, the Examiner argues that the Jorgenson reference discloses a container that includes an infusing chamber with a perforated wall portion intermediate a solid wall portion and the top of the container and a plunger assembly with a piston and an operator for moving the piston. The Examiner then argues it would have been obvious to one skilled in the art to substitute the piston of the Jorgenson reference with that disclosed in the Huang reference to prevent infusing material from passing through the piston member.

Applicants respectfully traverse this rejection.

As previously described, the Huang reference does not contain a one-way valve that provides both the filtering and isolation functions of claims 1 through 15. Thus even if it were appropriate to combine the Jorgenson and Huang references, the combination would not disclose the structure set forth in claims 1 and 15 or in depending claims 2 and 16 that define the plurality of one-way valves.

Applicants also respectfully submit that there is nothing in the references to suggest the proposed combination. The Jorgenson reference discloses a plunger with a filter screen 3a to contain infusible material. The plunger comprises a plunger shaft 4, a plunger 5 and a handle 10. There are no valves therethrough. That is, the plunger 5 is a solid structure. The objective of the Jorgenson reference is to provide a buoyant plunger so it resides on the surface of the beverage brewing cycle. When brewing is complete the plunger is driven

down past the screens to lodge in the bottom of the infusing chamber. Once the plunger enters the solid portion, the only place for liquid to escape is past a peripheral seal of the plunger. However, as the volume of the solid wall portion of the infusion chamber and the plunger decreases, pressures increase; the seal can release thereby allowing infusible material to escape into the brewing chamber. Therefore Applicants respectfully submit that claims 1, 2, 15 and 16 are not obvious in view of the Jorgenson and Huang references.

Claims 1, 3, 15, 17, 28 and 29

The Examiner also rejects claims 1, 3, 15, 17, 28 and 30 under 35 U.S.C. 103(a) as being unpatentable over the Jorgenson reference in view of U. S. Patent No. 5,478,586 to Connor (hereinafter the "Connor reference"). The Examiner argues again that the Jorgenson reference discloses all the claimed subject matter except a piston with a one-way valve arrangement and that the Connor reference discloses a piston that includes a one-way valve arrangement.

Applicants respectfully traverse this rejection.

The piston assembly in the Connor reference, as the Examiner states, comprises first and second rigid disks and an intermediate flexible disk 26. The flexible disk 26 is in fact a porous circular screen. A coil spring 34 biases the extending edge of the screen 26 into contact with the walls of the container to form a seal. When the filter moves upward, the infusible material is trapped above the filter 25. When the filter reaches its upper limit, the extending edge of the screen 26 forms a seal with a cylindrical lip 24 on the cap 42 thereby to isolate the material.

Consequently Applicants respectfully disagree with the Examiner's characterization of the screen 25 as a one-way

valve. It is nothing more than a filter. It does not have open and closed positions. Moreover, the system relies on peripheral sealing, such as described in the Background of the Invention, to prevent the escape of infusible material back into the beverage. Although this specific structure may reduce the possibility of infusion materials passing the seal during operation, the potential still exists.

Therefore Applicants respectfully submit that each of claims 1, 15 and 28 define a structure that is novel and not obvious in view of the Jorgenson and Connor references. Moreover, nothing in these references discloses a one-way valve in the flexible disk as is defined in claims 3, 17 and 30.

Examiner's Action - Allowable Subject Matter

The Examiner indicates that claims 18 through 27 and 31 through 37 would be allowed if rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicants respectfully defer rewriting the claims in independent form pending the reexamination of the rejected claims.

Examiner's Action - Conclusion

The Examiner has made prior of record including patents to Bersten, McCleary, Bondanini and Lyons. Applicants respectfully submit that none of these references taken singly or in combination with any of the references of record in this application disclose or suggest Applicants' invention as recited in each of claims 1 through 36.

Other Amendment

Applicants have also amended claim 3 to change a reference to "the one-way valve" to "said one-way valve" to remove any

ambiguity that might have existed with respect to the antecedent for the "one-way valve".

Summary

In summary, Applicants are amending claims 1, 3, 4, 15 and 28. Applicants respectfully submit that each of claims 1 through 36 in its original or amended form defines a structure that is novel and not obvious in view of the prior art. Therefore reconsideration and allowance of claims 1 through 36 is respectfully solicited.

If there are any questions, we urge the Examiner to call us collect.

Respectfully Submitted,

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